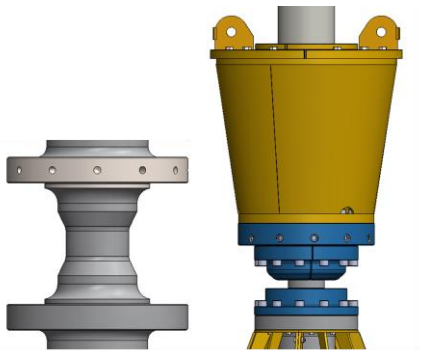
WELL INTERVENTION SYSTEM
WEAK LINK

PRODUCT DATASHEET

SYSTEM, PRODUCT AND SERVICE PROVIDER



Weak link features and benefits:

- No mechanical devices such as shear pins in combination with seals
- Designed to accept internal design pressure in combination with external specified bending moment
- Pure material rupture at specified capacity
- Strong enough for operation and installation loads and weak enough to protect the well assets
- Easily tailormade to specific applications

Product verification

- Two different material are used in tests, AISI 4145 and Inconel 718
- Elastic plastic material curve established by using test results
- Analyses carried out
- Testing carried out with good correlation between analyses and test results

Technical data for weak link

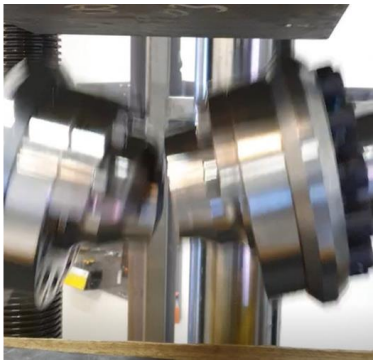
Design code	ISO 13628/7
Size, internal diameter	50-125 mm
Length of unit with ID= 101,5 mm ID	235 mm
Minimum wall thickness ID= 101,5 mm	9,1 mm
Design over pressure	690 bar
Material for 690 bar and ID= 100	Inconel 718,
Coating	Typical Norsok system 7, or as required

Tested to failure

Apply load

Large deformation

Large crack developed



Weak link separated

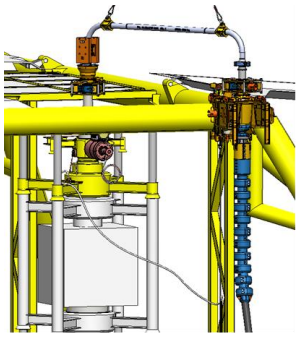



Illustration of intervention hose with weak link during testing prior to delivery

How it works

An example of use of the weak link is a delivery to well intervention system. The weak link in this case, is mounted between the hose and the well access system to protect the well system in case of vessel drift-off or extreme weather conditions. The bend restrictors ensure that the bending moment across the weak link will ensure that the weak link before any high loads are transferred to the well system.